

Attorney Docket No. STL11661/390-009-USP

REMARKS/ARGUMENTS

This Amendment and Response to Office action is submitted in response to the Office action dated March 21, 2006. Claims 1-22 are pending in the application. The Office has rejected claims 1-13 and 15-21 as described below. The Office has indicated that claims 14 and 22 are objected to but would be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

The Applicant has amended claims 14 and 22 to correct obviously typographical errors but has not canceled or added any claims. The Applicant has also amended claims 1, 7, 13, 15, and 21 to broaden the scope of the claims. No new matter has been added. Reconsideration and reexamination are respectfully requested.

As a preliminary matter, the Office has stated in multiple locations in the Office action that one claim has the "same" scope as another claim in this application. The Applicant respectfully traverses this assertion and submits that each pending claim in this application uniquely recites the invention, although some similar features may be shared among the various claims.

Rejections Under 35 U.S.C. § 102

The Examiner has rejected claims 1-4, 7-10, and 15-18 under 35 U.S.C. § 102(b) as being unpatentable over U.S. Patent No. 5,511,169 to Suda. The Applicant respectfully traverses the rejection for at least the following reasons.

Generally, Suda relates "to a local area network including a data transmission apparatus and a communication path management method therefor." Suda, Abstract (emphasis added). Suda discloses managing multiple communications paths through a network. In contrast, the present application describes communication between a host interface and a media controller of a data storage device using virtual channels over a data bus.

Claim 1 recites a generic host interface for a data storage device, which is not disclosed or suggested in Suda. Suda merely discloses management of multiple communication paths through a network. In contrast, the recited host interface includes a channel select bit encoder to assert one or more channel select bits indicating one or more virtual channels through which the host interface will communicate over the data bus. Suda fails to disclose or suggest any such encoder or channel select bits. The Applicant notes that the communication path number 21 of Suda specifically referenced by the Office is merely an element in a record of a communication path management table. This communication path number in a record of a table does not disclose or suggest a channel select bit encoder that asserts channel select bits in indicating virtual channels of a data bus.

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Furthermore, Suda fails to disclose or suggest any virtual channels through which a host interface can communicate over a data bus.

The host interface recited in claim 1 also includes a virtual channel controller to establish a connection with a media controller of a data storage device based on a virtual channel indicated by the channel select bits. Suda describes communication paths in a network but simply fails to disclose or suggest a virtual channel controller establishing a connection with a media controller based on a so-indicated virtual channel.

For the foregoing reasons, Suda fails to disclose all of the elements recited in claim 1 and therefore fails to anticipate or make obvious the invention recited in claim 1. Withdrawal of the rejection and allowance of claim 1 are respectfully requested.

Claims 2-4 depend from claim 1, which is believed to be allowable. As such, claims 2-4 include the same patentably distinct features as claim 1 and therefore are believed to be patentable for at least the same reasons as claim 1. Withdrawal of the rejection and allowance of claims 2-4 are respectfully requested.

Claim 7 recites a data storage device media controller, which is not disclosed or suggested in Suda. Suda merely discloses management of multiple communication paths through a network. In contrast, the recited data storage media controller includes a channel select bit decoder to decode one or more channel select bits indicating one or more virtual channels through which the media controller will communicate over the data bus with a host interface. Suda fails to disclose or suggest any such decoder or channel select bits.

The Office points to "inside element (sic) 7a and 7b" of FIG. 1 as support for its argument that Suda discloses these features, but the Applicant strenuously asserts that Suda makes no disclosure or suggestion of such a decoder or such channel select bits. In fact, Suda makes no textual description of 7a and 7b in FIG. 1 at all, and the description of 7a and 7b in FIG 6 is very limited:

Peripheral devices or systems 7a, 7b (which may be either hardware or software) are coupled to the other end of the communication network 2 for communicating with the data transmission apparatus 1. Suda, col. 1, lines 35-38.

The network 2 is physically connected to the data transmission apparatus 1 and the peripheral devices 7a, 7b by, for example, a pair of cables or a single optical cable. Software initialized the communication path which links the data transmission apparatus 1 and the peripheral devices 7a, 7b via the network. The transmission of data between the transmission apparatus 1 and the peripheral devices 7a, 7b is made after establishing a

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communication path with one of the corresponding peripheral devices 7a, 7b.

Suda, col. 1, lines 44-53.

While Suda discloses establishing a communication path across the network for communicating between the transmission apparatus 1 and the peripheral devices 7a, and 7b, Suda fails to disclose or suggest that these structures or any other structures include a decoder or channel select bits as recited in claim 7. Moreover, Suda fails to disclose or suggest that the establishment of a communication path across the network involves any decoder or channel select bits used as recited in claim 7.

Furthermore, Suda fails to disclose or suggest any virtual channels through which a medial controller can communicate over a data bus.

The media controller recited in claim 7 also includes a virtual channel controller to establish a connection with a host interface based on a virtual channel indicated by the channel select bits. Suda describes communication paths in a network but simply fails to disclose or suggest a virtual channel controller establishing a connection with a host interface based on a so-indicated virtual channel.

For the foregoing reasons, Suda fails to disclose all of the elements recited in claim 7 and therefore fails to anticipate or make obvious the invention recited in claim 7. Withdrawal of the rejection and allowance of claim 7 are respectfully requested.

Claims 8-10 depend from claim 7, which is believed to be allowable. As such, claims 8-10 include the same patentably distinct features as claim 7 and therefore are believed to be patentable for at least the same reasons as claim 7. Withdrawal of the rejection and allowance of claims 8-10 are respectfully requested.

Claim 15 recites a data storage device and includes similar features as claimed in claims 1 and 7. Claim 15 is believed allowable for at least the same reasons as argued with regard to claims 1 and 7. Accordingly, withdrawal of the rejection and allowance of claim 15 are respectfully requested.

Claims 16-18 depend from claim 15, which is believed to be allowable. As such, claims 16-18 include the same patentably distinct features as claim 15 and therefore are believed to be patentable for at least the same reasons as claim 15. Withdrawal of the rejection and allowance of claims 16-18 are respectfully requested.

Rejections Under 35 U.S.C. § 103

The Examiner has rejected claims 5, 11, and 19 under 35 U.S.C. § 103(a) as being unpatentable over Suda in view of U.S. Patent No. 5,763,405 to Sardo et al. ("Sardo"). The Applicant respectfully traverses the rejection for at least the following reasons.

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Claim 5 depends from base claim 1, claim 11 depends from base claim 7, and claim 19 depends from base claim 15. Base claims 1, 7, and 15 are believed to be allowable for at least the reasons previously stated herein. As such, claims 5, 11, and 19 include the same patentably distinct features as their respective base claims, and therefore are believed to be patentable for at least the same reasons as their respective base claims. Withdrawal of the rejection and allowance of claims 5, 11, and 19 are respectfully requested.

The Examiner has rejected claims 6, 12, and 20 under 35 U.S.C. § 103(a) as being unpatentable over Suda in view of U.S. Patent No. 5,790,811 to Hewitt. The Applicant respectfully traverses the rejection for at least the following reasons.

Claim 6 depends from base claim 1, claim 12 depends from base claim 7, and claim 20 depends from base claim 15. Base claims 1, 7, and 15 are believed to be allowable for at least the reasons previously stated herein. As such, claims 6, 12, and 20 include the same patentably distinct features as their respective base claims, and therefore are believed to be patentable for at least the same reasons as their respective base claims. Withdrawal of the rejection and allowance of claims 6, 12, and 20 are respectfully requested.

The Examiner has rejected claims 13 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Suda in view of U.S. Patent No. 6,073,218 to Dekoning et al. ("Dekoning"). The Applicant respectfully traverses the rejection for at least the following reasons.

Claim 13 depends from base claim 7 and claim 21 depends from base claim 15. Base claims 7 and 15 are believed to be allowable for at least the reasons previously stated herein. As such, claims 13 and 21 include the same patentably distinct features as their respective base claims, and therefore are believed to be patentable for at least the same reasons as their respective base claims. Withdrawal of the rejection and allowance of claims 19 and 21 are respectfully requested.

Allowable Subject Matter

The Applicant acknowledges the Office's objection to claims 14 and 22, in which the Office indicated that claims 14 and 22 are deemed allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. The Applicant has amended claims 14 and 22 to correct an obvious typographical error without changing the scopes of the claims.

Furthermore, the Applicant agrees with the Office's statement of reasons for the indication of allowable subject matter to the extent that it states that the recitations of claim 14 and 22 are patentable over the prior art. However, the Applicant disputes any suggestion or implication that the Office's statement should narrow the scopes of claims 14

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and 22 beyond that recited in the claims themselves. Furthermore, the stated reasons for the indication of allowable subject matter should not be considered exhaustive, as other reasons for patentability may exist.

CONCLUSION

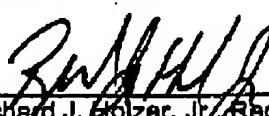
Claims 1-22 are currently pending in the application. Claims 1, 7, 13-15, and 21-22 have been amended. Applicant has fully responded to each and every rejection in the Office action dated March 21, 2006 and believes that claims 1-22 are in a condition for allowance. Applicant therefore requests that a timely Notice of Allowance be issued in this case.

The Applicant believes no fees or petitions are due with this filing. However, should any such fees or petitions be required, please consider this a request therefor and authorization to charge Deposit Account No. 50-3199 as necessary.

If the Examiner should require any additional information or amendment, please contact the undersigned attorney. If the Examiner believes any issues could be resolved via a telephone interview, the Examiner is invited to contact the undersigned at the telephone number listed below.

Dated: June 21, 2006

Respectfully submitted,


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